



Multi-Functional Intelligent Composite Structures: Design, Manufacturing and Applications

Guest Editors:

Dr. Mohammad Faisal Haider

Structures and Composites
Laboratory, Department of
Aeronautics and Astronautics,
Stanford University, Stanford, CA
94305, USA

Dr. Hanfei Mei

Department of Mechanical
Engineering, University of South
Carolina, Columbia, SC, USA

Deadline for manuscript
submissions:

closed (31 January 2022)

Message from the Guest Editors

This Special Issue aims to provide a forum for scientists and engineers to share and discuss their original findings or recent advances in multi-functional intelligent composite structures and their potential applications. It is envisioned that with the increasing demand of cyber-physical systems (CPS) for autonomy and autonomous systems, multi-functional intelligent composite structures will play a big role. CPS are a synergistic technology existing between physical and computational systems. Bio-inspired distributed sensors, actuators, and embedded devices are networked to sense, monitor, and control the physical system, whereas the cyber system provides an autonomous solution through artificial intelligence (AI). Multi-functional composites have anisotropic properties that can be tailored for a particular application.

Therefore, papers on the design, manufacturing, and application of advanced multi-functional intelligent composite structures and the damage detection methods are particularly welcome.

